

IN THE SPECIFICATION

Amend the paragraph beginning on page 5 at line 16 as follows:

According to the present invention, the structure of a tri-electrode biosensor by screen printing is illustrated in Fig. 1. Conductive wires 2 made of electrically conductive gel such as silver and gold, are formed on an insulating base plate 1, which is made of polyvinylchloride (PVC), polyester (PE), polyether, polycarbonate, or the like, by screen printing. Electrode strips are then formed on top of the conductive wires 2 by printing another layer of electrically conductive materials such as carbon, gold, and platinum. Electrodes containing a working electrode 3, a reference electrode 4 and an auxiliary electrode 5 (no auxiliary electrode in a bi-electrode sensor) are formed at one end above the layer of conductive wires. The corresponding contact ports 3', 4' and 5' at the other end with respect to the electrodes can be connected to a measuring device and a device activation line 6 can be automatically recognised by the measuring device. A non-electrically conductive or an insulating middle layer 7, which acts as an insulating dielectric layer as well as provides spacing with a U-shaped opening formed therein, is formed above the insulating base plate containing electrodes by adhesion or screen printing. Channel 7a designates a sample inflow area and an upwardly extended closed ~~chamber space~~ 8a with volume of about 2 μ l, is formed within an upper cover 8 ~~opposite a rear opposing to one end of the inflow channel 7a area~~. An active reaction layer containing substances of reactant, reaction catalyst (such as enzyme), mediator (such as dimethyl ferrocene, tetrathiofulvalene), wetting agent (cellulose, hydroxyethyl cellulose, carboxymethyl cellulose, polyvinyl alcohol, polyvinyl, pyrrolidone and gelatine, etc), and surfactant (tween 20, triton X-100, surfynol, mega 8, etc.) is spread on an electrode reaction area where reactions take place. The capillary inflow channel 7a, which allows sample such as blood to be rapidly introduced into and filled the electrode reaction area by capillary upon contact with the front tip thereof, is formed when the upper cover 8 is adhered to the middle layer 7. Reactions induced by reaction catalyst can subsequently take place between reactant and mediator, in which electric current can be generated and measured by the measuring device. The inflow channel can provide the electrodes with rapid fill in time (less than 1 second) and a minute amount of sample (less than 1 μ l).

Amend the paragraph beginning on page 9 at line 14 as follows:

The closed chamber ~~protrusion~~ 8a in the upper cover 8 can be round, rectangular or of other geometry shape and the desired size can be between 0.5 and 4 mm. The location of an opening of the chamber is above a rear end of the inflow channel and behind a working electrode. Blood sample can be filled in a reaction area, which flowing of the sample is then stopped by the opening of the chamber. The spacing layer 7 and the upper cover 8 can be made of transparent or opaque insulating materials such as plastics or polymers including PVC, Mylar, etc. Area 8a may be transparent for better inspection of sample flowing in by eyes and protection of sensor. The upper cover can be formed by 2 steps. The first step is to form an opening 8a in the upper cover, as shown in Fig. 1 and the second step is to apply another thin plate 9 (as shown in Figs. 4 and 5). Figs. 3 and 6 show the sensor illustrated in Fig. 1 in longitudinal, cross-sectional view, which contains the thin plate 9.